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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,027	10/22/2001	Warren Snyder	CYPR-CD00232	8635

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WAGNER, MURABITO & HAO LLP
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EXAMINER

PAN, DANIEL H

ART UNIT	PAPER NUMBER
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2183

MAIL DATE	DELIVERY MODE
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06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/033,027	SNYDER, WARREN	
	Examiner	Art Unit	
	Daniel Pan	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-18, 20, 21, 23-49, 51, 52 and 57-59 is/are pending in the application.
- 4a) Of the above claim(s) 12, 19, 22, 50 and 53-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-18, 20, 21, 23-49, 51, 52 and 57-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-11, 13-18, 20,21, 23-49, 51-52, 57, 58,59 are presented for examination. Claims 12, 19, 22, 50, 53-56 have been canceled.

2. Claims 1-11,13-18,20,21,23-49,51,52, 57-59 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01 The omitted elements are: The connection between the digital blocks themselves are not being clearly recited. The claims only recites the digital functional blocks coupled to the interconnect (e.g. see claims 1, 11, 17, see digital blocks coupled to the input and output bocks in claim 35, see digital blocks coupled to the analog blocks in claim 37, see routing matrix coupled the analog blocks to the subsets of digital blocks in claim 42). The connection between the digital circuit (components) and analog circuit (components) is not clear (see claims 51,52).

3. In the remarks applicant argued that Applicants respectfully traverse the "112 2nd" Applicants respectfully assert that Claims 1-11, 13-18, 20-21, 23-49, 51-52, and 57-59 recite that which is novel as well as those necessary structural Cooperative relationships of elements necessary to practice the invention, as required by 35 USC § 112. For example, it is well understood to couple a plurality of functional units to a bus.

As to the applicant's remarks above, the connection between the digital blocks themselves are not being clearly recited. The claims only recites the digital functional blocks coupled to the interconnect (e.g. see claims 1, 11, 17, see digital blocks coupled to the input and output bocks in claim 35, see digital blocks coupled to the analog blocks in claim 37, see routing matrix coupled the analog blocks to the subsets of digital blocks in claim 42).While it may be well understood to couple a plurality of functional units to a bus, the connection between a plurality of functional units is unclear. For example, any direct connection between a first function unit and second function unit

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? Also, the connection between the digital circuit (components) and analog circuit (components) is not clear (see claims 51,52).

4. Claims 1,37,52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tzori (5,748,875) in view of Insenser Farre et al. (6,460,172).

5. Amended claim1 is directed to correct the formality of the clam language not affecting the scope.

6. Claims 1-11,13-18,20,21,23-49,51,52, 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Insenser Farre et al. (6,460,172)in view of Furtek (5,894,565) in view of van der Wal et al. (6,188,381).

7. Claims 58,59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Insenser (6,460,172) in view of Gammal et al. (5,754,826) in view of van der Wal et al. (6,188,381).

8. TD on 03/26/07 has been entered. The double patenting has been withdrawn.

9. The rejections are maintained and incorporated y reference the last office action on 12/21/06.

10. The response filed on 03/26/07 has been fully considered but is not persuasive.

11. In the remarks applicant argued that :

a) Tzori and Incense are non-analogous art;

b) Incense is directed to user programmable integrated circuit. Tzori is directed to digital logic simulation/emulation;

- c) Tzori's "pod 32" is not a bus;
- d) a microcontroller is a single IC
- e) IC socket 34 cannot be integrated to microcontroller;
- f) trace 42 and data-bus 278 are merely wiring traces on printed circuit board. Printed circuit board traces lack dynamic configuration and programmability;
- g) applicant recites single register write;
- h) applicant do not find video processing system taught by van der Wal to commend van der Wal to applicants in consideration of applicant's problem.
- i) optimized interface 9 is not a bus;
- j) Incense taught RAM for data and program;
- k) the single write referred to 10 CUBE IQ96 cross point switch devices as a whole;
- l) "proged" by microprocessor does not teach coupling programmable digital circuit blocks to programmable analog circuit blocks;
- m) Applicants respectfully assert that the rejection misinterprets this disclosure as teaching the configuration or reconfiguration of a device with a single register write, as in Independent Claim 1. In contrast, this cited passage is directed to one control register write that is capable of switching all bits of video data in all devices simultaneously.

12. As to a) and b) above, Tzory is directed to provide system designers of simulation with simple and cost effective simulation system that faithfully incorporated one or more ICs into a digital logic computer simulation program without requiring that simulations program for the ICs be included in the computer program (see col.3, lines 50-67, col.4, lines 1-20), and Incense is directed to user friendly tools of simulation engines to provide easy migration of the ICs (see simulation engines and user friendly in col.2, lines 27-67). Therefore, both Tzory and Incense were directed to the same problem being solved, that is the user friendly system in IC simulation.

13. As to c) Tzori's "pod 32" was a printed circuit board (see fig.1). Therefore, it is a bus. Is applicant trying to take the position that applicant's bus has nothing to do with circuit ?

14. As to d), a microcontroller can be single IC or multiple IC's depending on the design.
15. As to e) IC socket is an integrated circuit. Therefore, it can be integrated into microcontroller.
16. As to Printed circuit board traces themselves do not necessarily mean that they lack dynamic configuration and programmability. The dynamic configuration and the programmability are on the program functionalities or the software with a given circuit traces and bus. Therefore, trace 42 and data-bus 278 are not merely wiring traces on printed circuit board. In fact, the circuit board traces 42 and data bus 278 were dynamically configurable and programmable (see volatile memory functions to program the functionalities, see also RAM 52 contained program to configure the digital blocks 36 in col.8, lines 45-55, see also the loading of the configuration data in col.9, lines 31-42 for the write operation).
17. As to g), Tzori taught loading the configuration data into logic ICs (see col.9, lines 31-42). Therefore, it encompassed a single register write.
18. As to h), applicant's problem has never been recited in the claim. Unclaimed features cannot be used to overcome the prior art. Applicant is reminded that unclaimed features cannot be used to overcome the prior art (e.g. see CCPA In re Lundenberg & Zuschla, 113, USPQ 530, 534 (1957)). The specific analog and digital functions in the specification are not being reflected into the claims. Nevertheless, the modular video processing system taught by van der Wal commended van der Wal to applicants in consideration of applicant's problem(see Pages 3 -5).
19. As to I), optimized interface 9 was a bus.
20. As to j) Incense taught a RAM for storing data and program (see RAM 1 in fig,1). Therefore, it suggested the need for non-volatile memory for protecting the data and program. Hence, the principle of operation has not been changed.
21. As to k), the number of CUBE IQ96 devices is not relevant to the one write operation.

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22. As to l), Incenser taught any point inside the digital blocks or the analog blocks can be probed by microprocessor (col.3, lines 41-44) . Since a microprocessor had been known to be programmable, probed by microprocessor did teach the applicability of coupling programmable digital circuit blocks to programmable analog circuit blocks, or the like.

23. As to m), switching itself is already a reconfiguration.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172.

The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

21 Century Strategic Plan

DANIEL H. PAN
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